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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,236	01/29/2002	Akira Murakami	330-243	2265

7590 11/14/2003
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EXAMINER

LOPEZ, CARLOS N

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	10/058,236	MURAKAMI, AKIRA	
	Examiner	Art Unit	
	Carlos Lopez	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1) Claims 1-3, and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Murakami et al JP 10-236831 (for which US 6,442,975 is taken as the JP equivalent). Murakami discloses a method for making a glass substrate for a recording medium. As shown in figure 8B, molten glass 42 (deemed as glass in a soften state) is press molded by molds 17 and 14. The glass is pressed molded to have a disk shape with a thickness of 2-4 mm which reads on instant claims 8-9 (Col. 2 lines 64ff). As shown in figure 10 the circumferential edge of glass blank 44 does not touch the mold dies 17 and 14 as it is being pressed formed. Additionally the glass substrate does not have a notch.

As for claim 2, the claimed flat front surface, reverse surface and a surface formed of the surrounding edge portion is deemed respectively as the top surface, bottom surface and edges surface the Murakami's glass blank 44.

As for claim 3, Murakami teaches that the glass substrate blank 44 has a thickness greater than the final product, which is the claimed glass substrate (Col. 15, lines 59-60).

As for claim 6, the soften glass is supplied to the lower mold as shown in figure 7A.

As for claim 7, the molds have a temperature of 250-450 degrees Celsius for the upper mold and the lower mold having a temperature 50 to 100 degrees lower than the upper mold wherein the temperature of the softened glass is 1200 degree Celsius (Col 10, lines 50ff).

2) Claims 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (JP 10-194760). As shown in figures 3-5, molten glass 42 (deemed as glass in a soften state) is press molded by molds 21 and 31. As shown in figure 5 the circumferential edge of glass blank 12 does not touch the mold sides 21 and 31 as it is being pressed formed but instead it touches the mold sleeve 36.

As for claim 3, since the substrate is grinded and polished to form a final glass substrate, it would be inherent that the intermediate substrate blank is thicker than the final glass substrate.

As for claim 4, as shown in figures 2 and 7, the small thickness portion is larger than the thicker portion.

As for claim 5, figures 2 ad 7 show a thicker portion at the middle and edges of the substrate blank.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3) Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al JP 10-236831 (for which US 6,442,975 is taken as the JP equivalent). Murakami teaches that the glass blank may be grinded and polished (Col. 7, lines 19ff). However, Murakami is silent on cutting the glass blank. The Murakami method is for the production of a recording medium such as a CD. Since CDs currently have a hole at the center it would be obvious to a person of ordinary skill in the art at the time the invention was made that a cut would be expected on the glass blank disc in order to form the hole of an information recording medium CD.

In regards to claim 13's limitation of forming an information layer on the substrate, Murakami teaches of laminating a magnetic layer on the substrate (Col. 7, line 57ff).

As for claim 12, Murakami teaches of using crystallized glass as the glass substrate, see col. 7-8, and hence would require a heat treatment.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References B-G and O-Q in PTO-892 have been cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174 and after Dec. 18 2003 calls should be directed to (571) 272-1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (703) 308-1164 and after Dec. 18 2003 calls should be directed to (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

CL


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700